SOFTWARE REVIEW

TREEDIS. A rainforest tree distribution data base by Veron Hansen and Garry Sankowsky. 1992. Price A$95.00 (post paid). Available direct from the authors, P.O. Box 210, Tolga, Qld, 4882.

Frequently the study of an insect's biology requires special botanical data not readily accessible by entomologists. Distributions of rainforest trees is but one example. TREEDIS not only supplies such information for more than 2000 Australian rainforest shrubs and trees but also provides an interactive program which will list species from defined areas or environments, lists species from sites with similar characteristics and report on environmental characteristics of sites. Data can be printed out at any stage although maps require either Epson or Hewlett Packard laser compatibility (these, in fact, cover almost all printers).

The value of this program to any entomologist with an interest in the study of insect life cycles should not be underestimated. To clarify the program's usefulness it is probably best to examine the options of the Main Menu. Option A provides distributions for given plant species. For example, if the plant *Celtis philippensis* is mapped it becomes clear that the Australian Beak butterfly which feeds on this plant may occur at Lawn Hill, a locality previously unrecorded for this butterfly. Distribution maps are available either on an Australia-wide basis following the standard 1 to 250,000 map series, or in detail at a five minute resolution. With the latter, precise locality details are available simultaneously with the map. Option A also permits site analyses, i.e. details distribution limits; lists all exact sites for the species together with habitat details; gives percentage of forest type occupied by the species; and lists rainfall preference, altitude preference and soil preference.

Option B lists all plant species known from a specific site. The sub-options within Option A are also available here. Over 700 sites are available for selection but these must be accessed via site number. This option also allows identification of forest types for a locality, e.g. Thursday Island.

Option C lists species from environmental parameters selected by the user, again with the sub-options as for Option A. Parameters available for choice include rainfall, altitude, soil origin and forest type. This Option will, for example, list all other sites matching a site of known forest type and altitude and give a list of all plant species known from each of these sites. It is also possible to choose a State and then find all rainforest localities (e.g. map all Northern Territory rainforest patches) or define an area by latitude and longitude.

Option D permits a search for a text string. One can ask for a specific forest type, a specific place, or a specific soil type, etc. For example, if semi-deciduous notophyll vine forest (forest types can be selected from a list of 25 provided) then a list of all plant species known from that forest type is provided and, as in all previous Options, map plotting, site details etc. are all available on selection.

Option E prints any of three data files, i.e. species list (41 pages), site list (47 pages) and a readme file (1 page). Option F permits alteration of printer set-up. In addition any data set can be saved as a file and printed.

While the program covers all States of Australia data for Queensland is by far the most comprehensive. Much of the data is based on the collection records of L.J. Webb and J.G. Tracey although Sankowsky has added a significant number of his own records from Cape York Peninsula in particular.

I found only one minor difficulty in using this software package. This concerns Option B which provides access to site data via a site number. Data relating to these site numbers can be obtained through Option E by printing the 47 page list as hard copy. From a screen it is somewhat cumbersome. Perhaps a future upgrade could include an alphabetical list of sites directly accessible on screen.

In a way it is somewhat ironical that I should be writing this first software review for the *Australian Entomologist*. I am certainly not a computer fanatic and computers seem to sense this when I use them. However, I found TREEDIS easy to install and easy to use and have no hesitation in strongly recommending the program to anyone with an interest in rainforest plant/insect associations. It forms a perfect companion to the interactive identification program of B.P.M. Hyland and T. Whiffin, 'Australian tropical rainforest trees.'

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